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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,855	05/10/2001	Raymond A. Berard	14060/198355(IRC289)	5678

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EXAMINER
WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
1714	7

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/852,855	BERARD, RAYMOND A.	
	Examiner	Art Unit	
	Katarzyna Wyrozebski Lee	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

In the light of the applicant's response to the office action mailed on 12/6/2002 following final office action has been necessitated. All the rejections over the prior art of record are incorporated here by reference.

In the amendment filed on 3/18/2003 the applicant's have further limited the independent claim 1 to read on a temperature of less than 160°C. However, examples of the prior art of record teach temperature of 140°C and elevated pressure of 250 psig, which dissolves polyamide. The amendment to the claims therefore does not overcome the rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-10, 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang (US 6,036,726).

The prior art of Yang from paragraph 2 of the office action mailed on 12/6/2002 is incorporated here by reference.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,036,726) in view of Meyer (US 4,334,056).

The discussion of the disclosure of the prior art of Yang and Meyer from paragraph 2 and 5 of the office action mailed on 12/6/2002 is incorporated here by reference.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,036,726) in view of Booij (US 5,840,773).

The discussion of the disclosure of the prior art of Yang from paragraph 2 and Booij from paragraph 6 of the office action mailed on 12/6/2002 is incorporated here by reference.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,036,726) in view of Stott (US 2,742,440).

The discussion of the disclosure of the prior art of Yang from paragraph 2 and Scott from paragraph 7 of the office action mailed on 12/6/2002 is incorporated here by reference

8. In the amendment filed on 3/18/2003 the applicant has argued the following:

a) The prior art of Yang does not operate at a pressure higher than the vapor pressure of the of the solvent at solvation temperature.

With respect to the above argument, independent claim of the present invention calls for equilibrium pressure without any specific numerical ranges and at elevated temperature so that the solvent can dissolve the nylon. The prior art of Yang teaches dissolving nylon at 140°C, which is elevated temperature and according to examples at a pressure of 250 psig, which is elevated pressure, and such pressure and temperature combination is high enough to dissolve nylon.

b) The prior art of Yang is concerned with decolorizing nylon and thereby contains numerous steps different from nylon recovery.

With respect to the above argument, removing dyes and pigments from nylon can definitely be viewed as recovering pure nylon. The title of the prior art of Yang says "process of separating polyamide from colorant" so actually it is polyamide that is separated. In addition regardless of what the prior art of Yang does with the dyes and what steps are involved, the polyamide composition is dissolved, dyes and colorants as impurities are removed and

polyamide is recovered per claim 9 of Yang. These steps are in broad sense the same steps as those in the present invention.

c) The prior art of Yang does not utilize pressures higher than vapor pressure of the dissolution and dissolution temperature.

With respect to the above argument, the column and line number that the applicant has referred the examiner to simply states that the pressures utilized in the process will vary with the solvent. This makes sense, since different solvents have different boiling points and so on. It does not say anything about pressure being lower than the vapor pressure of the solvent. In fact alkanol solvents such as ethanol at 140°C and 250 psig (see example 12) are well within the scope of the invention.

d) Claim 12 has not been rejected by Yang therefore elevated dissolution pressure is not taught by Yang.

With respect to the above argument, since neither claim 1 or 12 teaches any numerical value of the pressure the prior art of Yang applies. Secondary prior art was utilized to reject claim 12 not because of the elevated pressure limitation but due to limitation of inert gas as it was pointed out in paragraph 7 of the first office action on the merits. The examiner has not admitted to the lack of elevated pressures by Yang.

e) The examiner has not established *prima facie* case of obviousness and should withdraw the rejection.

With respect to the above argument, the examiner would like to point the applicant to paragraph 2 of the first office action on the merits, where it is stated that the prior art of Yang constitutes a 102 rejection not a 103. *Prima facie* arguments are presented by the examiners in case of 103 rejections.

f) Myers is not concerned with recycling of nylon, but coating metal substrate.

With respect to the above argument, the reasons why examiner combines the prior art of record does not have to be the reasons applicant's reasons In re lintner, 458 F2d 1013; 173 USPQ 560 (1972). The prior art of Myers discloses process of making polyamide powder, such as nylon in ethanol. While the prior art of Yang in broad sense encompasses the conditions of the present invention, the prior art of Myers was utilized to show more narrow embodiments. The fact is that one of ordinary skill in the art of nylon would know such ranges. Since nylon is present in the composition of Myers it is therefore also dissolved at the temperatures disclosed by Myers. Utilizing the same temperatures in process of Yang are well within a scope, therefore the *prima facie* case has been established since nylon 6 would have also been dissolved.

g) The applicants find the statement of the rejection of the Yang in view of Booij confusing.

With respect to the above comment, the first two lines of the body of the rejection do contain typo. However, as the paragraph stated the rejection is over Yang in view of Booij, just like applicants indicated.

h) The prior art of Booij does not cure the deficiencies of Yang, since it does not teach elevated pressures.

With respect to the above argument, the prior art of Yang did not have deficiencies and the prior art of Booij was utilized to otherwise teach narrower embodiments of dependent claims.

i) The prior art of Stott teaches higher temperatures; therefore one of ordinary skill in the art would not arrive at the present invention.

With respect to the above argument, the prior art of Stott was utilized to provide for presence of inert gas and not elevated temperatures and pressures. The prior art of Yang also conducts experiments at 3 temperatures: 140°C, 160°C and 180°C and although applicants claim that the preferred temperatures of Yang are 160-180°C, you can not just omit the rest of the specifications and examples teaching temperatures lower than 160°C.

j) Neither Stott nor Yang indicates that the nylon reclaimed retains its molecular weight.

With respect to the above argument, such result is of no issue if it is not part of the claim. Just because the prior art uses injection molding as intended use has no bearing on the process which is disclosed and utilized in recovery of the polyamide. In addition, applicant's arguments of degradation of nylon, although very insightful, have not bee part of the claims and thereby do not overcome the prior art applied.

k) Each of the references has high temperatures and long dissolution times.

With respect to the above argument, the prior art discloses exactly the temperature taught by the present invention. Dissolution times are not part of the claims.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna W. Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

KIWL
May 28, 2003

EDWARD J. CAIN
PRIMARY EXAMINER
GROUP 1500